

AMENDMENTS TO THE SPECIFICATION

Please replace the present title with the following amended title:

OPTIMAL INSTRUCTION CREATION DEVICE OPTIMUM COMMAND
PRODUCING APPARATUS

Please replace the paragraph no. [0045] of US Publication No. 2006/0015217 A1,
with the following amended paragraph:

If $D2 = 0$ is not set, the Equations (3) to (5) are changed into Equations (11) to (13).

$$X_{ref} = \frac{1}{D2 \cdot s + K2} \cdot \{K2 \cdot XL + D2 \cdot XL^{(1)} + J2 \cdot XL^{(2)}\} \quad \dots (11)$$

$$V_{ref} = \frac{1}{D2 \cdot s + K2} \cdot \{K2 \cdot XL^{(1)} + D2 \cdot XL^{(2)} + J2 \cdot XL^{(3)}\} \quad \dots (12)$$

$$T_{ref} = \frac{1}{D2 \cdot s + K2} \cdot \{(K2 \cdot XL^{(2)} + D2 \cdot XL^{(3)} + J2 \cdot XL^{(4)}) \cdot J1 + J2 \cdot K2 \cdot XL^{(2)}\} \quad \dots (13)$$

Please replace the paragraph no. [0067] of US Publication No. 2006/0015217 A1,
with the following amended paragraph:

While $L = 4$, $N = 5$ or $N = 2$, and $M = 1$ are set because the control object is set to have the 2-inertia system in the three embodiments described above, it is a matter of course that the apparatus can be applied to all other control objects. At that time, the ~~valuable~~ variables L , N and M may have other values.